

Abstract

A method, system, and computer program product for storing and managing a knowledge profile are described. The knowledge is stored in knowledge units representative of unconstrained natural language (NL). Any given knowledge unit is associatable with at least one other knowledge unit with the given knowledge unit being a context knowledge unit, and the at least one other knowledge unit being a detail knowledge unit of the associated context knowledge unit, and such that every given context knowledge unit that has at least one associated detail knowledge unit satisfies a NL relationship there-between that corresponds to one of the NL-expressible forms of the NL word “have”. The profile includes a core set of knowledge units for a core vocabulary of words, at least some of which are associated with knowledge units to provide a basic meaning of the associated words. The profile further includes a core set of knowledge units for core processing and core parsing NL-expressible knowledge. The knowledge units are arranged in accordance with a predefined structure that reflects context-detail relationships and that is dynamically extensible to include other knowledge units during run-time; and the placement and relationships of knowledge units within the predefined structure further reflect semantic interpretations of the knowledge units and support algorithmic reasoning about the knowledge in the profile. In certain embodiments, the profile includes NL class structures to form knowledge units to represent NL words and phrases, and the profile includes NL word class structures to form knowledge units to represent NL words.